AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-31 (Cancelled)

32. A method of controlling transmission power in a mobile radio system in which a power control algorithm controls transmission power as a function of a transmission quality target value, said method comprising the steps of:

in the event of a target value variation applied to compensate the effects of a compressed transmission mode in which transmission is interrupted during transmission gaps and the bit rate is increased correspondingly to compensate for the transmission gaps, wherein said target value variation includes a first component for compensating for the effects of said increased bit rate and a second component for compensating for other effects of transmission gaps, obtaining an approximate value of said target value variation, by approximation of said second component, and

anticipatorily varying the transmission power by an amount corresponding to said approximate value of said target value variation. .

33. A method according to claim 32, comprising a step of obtaining an approximate value of said second component for a given transmission direction, from the second component for the opposite transmission direction.

34. A method according to claim 32, wherein said power control algorithm simultaneously controls the transmission power of at least two channels, including a data channel and a control channel, as a function of a transmission quality target value, and the transmission power of said control channel is offset relative to the transmission power of said data channel, said method comprising a step of applying anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, in order to obtain an anticipated variation of the transmission power of the data channel that corresponds to said approximate value of the target value variation.

35. A method according to claim 34, wherein, in the event of target value variation, said anticipated variations of at least one of the transmission power of the data channel , the transmission power of the control channel and/or of the offset of transmission power of the control channel relative to the transmission power of the data channel are determined so that the power of the signal transmitted on the control channel is the same before and after said target value variation and over the same reference period.

36. A method according to claim 34, wherein, in the event of target value variation, an anticipated variation of the offset of the transmission power of the control channel relative to

the transmission power of the data channel is applied that corresponds to the opposite of said approximate value of the target value variation.

37. A method according to claim 34, wherein, in the event of target value variation, an anticipated variation of the transmission power of the data channel and the transmission power of the control channel is applied that corresponds to said approximate value of the target value variation.

38. A method according to claim 32, wherein said target value is adjusted by an adjustment algorithm as a function of a required quality of service and said target value variation is intended, in the event of a change to the required quality of service, to anticipate the corresponding target value variation adjusted by said adjustment algorithm.

39. A mobile radio system in which a power control algorithm controls transmission power as a function of a transmission quality target value, said mobile radio system comprising:

means for, in the event of a target value variation applied to compensate for the effects of a compressed transmission mode in which transmission is interrupted during transmission gaps and the bit rate is increased correspondingly to compensate for the transmission gaps, wherein said target value variation includes a first component for compensating for the effects of said increased bit rate and a second component for compensating for other effects of transmission

gaps, obtaining an approximate value of said target value variation, by approximation of said second component, and

means for anticipatorily varying the transmission power by an amount corresponding to said approximate value of said target value variation.

40. A mobile radio system according to claim 39, wherein said transmission power control algorithm simultaneously controls the transmission power of at least two channels, including a data channel and a control channel, as a function of transmission quality target value, with the transmission power of said control channel offset relative to the transmission power of said data channel, said mobile radio system comprising means for applying anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel in order to obtain said anticipatory variation of the transmission power of the data channel.

41. A mobile radio system according to claim 40, further comprising means such that, in the event of target value variation, said anticipated variations of the at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel cause the signal transmitted on the control channel to have the same power before and after said target value variation and over the same reference period.

42. A mobile radio system according to claim 39, comprising means for applying, in the event of target value variation, an anticipated variation of the offset of the transmission power of the control channel relative to the transmission power of the data channel that corresponds to the opposite of said approximate value of the target value variation.

43. A mobile radio system according to claim 39, comprising means for applying, in the event of target value variation, an anticipated variation of the transmission power of said data channel and the transmission power of said control channel that corresponds to said approximate value of the target value variation.

44. A base station in which a power control algorithm controls a downlink transmission power as a function of a transmission quality target value, said base station comprising:

means for, in the event of a target value variation applied to compensate for the effects of a compressed transmission mode in which transmission is interrupted during transmission gaps and the bit rate is increased correspondingly to compensate for the transmission gaps, wherein said target value variation includes a first component for compensating for the effects of said increased bit rate and a second component for compensating for other effects of transmission gaps, obtaining an approximate value of said target value variation, by approximation of said second component, and

means for anticipatorily varying the transmission power by an amount corresponding to said approximate value of said target value variation.

45. A base station according to claim 44, wherein said transmission power control algorithm simultaneously controls the transmission power of at least two channels, including a data channel and a control channel, as a function of transmission quality target value, with the transmission power of said control channel offset relative to the transmission power of said data channel, said base station comprising:

means for applying, in the event of target value variation, anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, to obtain said anticipatory variation of the transmission power of the data channel.

46. A base station according to claim 45, further comprising means such that, in the event of target value variation, said anticipatory variations cause the signal transmitted on the control channel to have the same power before and after said target value variation and over the same reference period.

47. A base station according to claim 44, comprising means for applying an anticipatory variation of the offset of the transmission power of the control channel relative to

the transmission power of the data channel that corresponds to the opposite of said approximate value of the target value variation.

48. A base station according to claim 44, comprising means for applying an anticipatory variation of the transmission power of said data channel and the transmission power of said control channel that corresponds to said approximate value of the target value variation.

49. A base station according to claim 44, comprising means for using said second component which is signaled to it by a base station controller for the purposes of uplink power control to determine said approximate value of the downlink target value variation.

50. A mobile station in which a power control algorithm controls an uplink transmission power as a function of a transmission quality target value, said mobile station comprising:

means for, in the event of a target value variation applied to compensate for the effects of a compressed transmission mode in which transmission is interrupted during transmission gaps and the bit rate is increased correspondingly to compensate for the transmission gaps, wherein said target value variation includes a first component for compensating for the effects of said increased bit rate and a second component for compensating for other effects of transmission gaps, obtaining an approximate value of said target value variation, by approximation of said second component, and

means for anticipatorily varying the transmission power by an amount corresponding to an approximate value of said target value variation.

51. A mobile station wherein said transmission power control algorithm simultaneously controls the transmission power of at least two channels, including a data channel and a control channel, as a function of transmission quality target value, with the transmission power of said control channel offset relative to the transmission power of said data channel, said mobile station comprising:

means for applying, in the event of target value variation, anticipated variations of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, to obtain an anticipated variation of the data channel transmission power.

52. A mobile station according to claim 51, further comprising means such that in the event of target value variation said anticipated variations cause the signal transmitted on the control channel to have the same power before and after said target variation and over the same reference period.

53. A mobile station according to claim 51, further comprising means for applying an anticipated variation of the offset of the transmission power of the control channel relative to the

transmission power of the data channel that corresponds to the opposite of said approximate value of the target value variation.

54. A mobile station according to claim 51, further comprising means for applying an anticipated variation of the transmission power of said data channel and the transmission power of said control channel that corresponds to said approximate value of the target value variation.

55. A mobile station according to claim 50, further comprising means for using said second component which is signaled to it by a base station controller for the purposes of downlink power control to determine said approximate value of the uplink target value variation.

56. A base station controller for a mobile radio system in which a power control algorithm controls transmission power as a function of a transmission quality target value, and in which a target value variation is applied to compensate for the effects of a compressed transmission mode in which transmission is interrupted during transmission gaps and the bit rate is increased correspondingly to compensate for the transmission gaps, said target value variation including a first component for compensating the effects of said increased bit rate and a second component for compensating other effects of transmission gaps, said base station controller comprising means for signaling the same value for said second component for both transmission directions to a base station and to a mobile station.

57. A system according to claim 39, comprising means for obtaining an approximate value of said second component for a given transmission direction, from the second component for the opposite transmission direction.

58. A base station according to claim 44, comprising means for obtaining an approximate value of said second component for the downlink, from the second component for the uplink.

59. A base station according to claim 38, comprising means for using said second component which is signaled to it by a base station controller, for obtaining said approximate value of the downlink target value variation.

60. A mobile station according to claim 50, comprising means for obtaining an approximate value of said second component for the uplink, from the second component for the downlink.

61. A base station, comprising:

means for controlling a downlink transmission power as a function of a transmission quality target value,

means for using parameters signaled to said base station for the uplink, to determine a target value variation applied in compressed mode, and

means for applying a power offset to said downlink transmission power, corresponding to the thus determined target value variation.

62. A base station according to claim 61, wherein said parameters signaled to said base station for the uplink include:

a parameter (DeltaSIR1, DeltaSIR2) for a compressed frame, and

a parameter (DeltaSIRafter1, DeltaSIRafter2) for the second one of two consecutive compressed frames in the case where a transmission gap begins in the first one of said two frames and finishes in the second one of said two frames, or for a frame following a compressed frame otherwise.